

The image features a stylized illustration of a computer monitor on the right side, tilted slightly. The monitor's screen shows a glowing yellow globe with a grid pattern. The background is a warm, orange-hued sky with soft, white clouds. The overall aesthetic is modern and digital.

## **APFO Infrastructure Upgrade**

# *Challenges*

- ✓ **NAS Purchased to support Resource – 18 months old, have experienced 15 disk failures**
- ✓ **ES3500 Server (legacy) failures started June, continued until October**
- ✓ **Disk Array failure \_September**
- ✓ **Not enough network ports to support new equipment**

# *Infrastructure Upgrade*

- ✓ Intended to upgrade legacy hardware
- ✓ Increase storage capability
- ✓ Introduce new technologies to enhance inspection capabilities
- ✓ Consolidate tape libraries
- ✓ Increase archive capabilities
  - ✓ 6 -T10000 tape drives installed. New tape technology holds 1TB per tape
- ✓ Purchased new servers to create Virtual Server (up to 180 server instances)
  - ✓ Reduces physical footprint in Datacenter
  - ✓ Reduces power consumption
  - ✓ Meets Federal Mandates for Green Data Centers
- ✓ Upgrade network infrastructure to USDA web farm standards
  - ✓ New Security Stack
  - ✓ Installation of WAN accelerator
  - ✓ Creation of several separate virtual networks
    - ✓ Reduces impact on production network
    - ✓ Isolates Production from test & dev
    - ✓ Ensures bandwidth (amount) is available as specified

# *TIMELINE*

June 2009 -  
FSA REC'D  
FUNDING

Oct /Nov 2009  
-Installation  
and Migration

Sept 2009 -  
Purchasing  
Complete

March/April  
2010 Telecom  
Upgrade  
Starts

